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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,308	09/19/2003	Spencer M. Nimberger	PGI-116	7925

7590 01/12/2005  
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EXAMINER
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LAI, ANNE VIET NGA

ART UNIT	PAPER NUMBER
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2636

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

OK

<b>Office Action Summary</b>	Application No. 10/666,308	Applicant(s) NIMBERGER ET AL.	
	Examiner Anne V. Lai	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14, 20-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-19 is/are allowed.
- 6) ☒ Claim(s) 1-14 and 20-26 is/are rejected.
- 7) ☒ Claim(s) 1, 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

In figure 1, the number 46 cannot be read.

In figure 2, numbers are missing for the query timer (21) and the power take off (46).

The number "90" in page 9 of specification is not shown in the drawing.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claim 1 is objected to because of minor informalities: In claim 1, the "a timer" in line 5 should be "a query timer" as referred in line 8. There is no antecedent basis for "the query timer" in line 8. Appropriate correction is required.

In claim 26, claim 26 is claimed dependent claim 1 may be by error typing; Claim 26 seems being dependent claim 20. Appropriate clarification is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 7-8, 10, 12-14, 20, 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by **Gunton** [US. 5,999,087].

Regarding claims 1 and 20, **Gunton** (figs. 1-2; col. 1, lines 16-53)) discloses a safety shutdown system and a method for controlling a fluid delivery system, comprising:

a timer 34 activated in response to a timer activation signal for timing the countdown interval;

a timer activation input (key 40; col. 12-18) for selectively inputting the timer activation signal to selectively enabling the timer;

a wireless transmitter 24 for selectively transmitting a timer reset signal to the timer to reset the countdown interval (continue control 48; col. 12-18);

a controller for automatically closing the valve and shutdown the engine if the timer times out (col. 2, lines 50-51).

Regarding claim 7, **Gunton** discloses the fluid flows from a first fluid vessel to a second fluid vessel, the first fluid vessel is a tank on a vehicle, and the second fluid vessel is a tank structurally separate from the vehicle (col. 1, lines 16-18).

Regarding claims 8 and 24, **Gunton** discloses one or more function activators for activating one or more selected functions in response to a function activation signal from the wireless transmitter (operation of the keys 40 reset the timers, closing the valve and instruct some other actions at the tanker; col. 2, lines 62-67; col. 3, lines 17-18).

Regarding claims 10 and 25, **Gunton** discloses the controller automatically turns off at least some selected functions if the timer times out (closing the valve, shutdown the engine; col. 2, lines 50-51).

Regarding claim 12, **Gunton** discloses an alarm initiated by the controller (alarm 36 in fig. 2).

Regarding claims 13 and 26, **Gunton** discloses the alarm 46 sounds prior to the timer 34 times out (col. 2, line 65 through col. 3, line 11).

Regarding claim 14, **Gunton** discloses the wireless transmitter transmits signal within a radio frequency range (col. 3, lines 61-62).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gunton** in view of **Graf** [Encyclopedia of Electronic Circuit Vol. 1].

Regarding claims 2 and 21, **Gunton** does not disclose specifically the timer activation signal comprises at least one pair of input terminals for selectively inputting the timer activation signal; **Graf** teaches a washer timer (shut-off system for fluid delivery) comprising at least one pair of input terminals for selectively inputting the timer activation signal (R1-R5, fig. 88-17, page 668). It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to make an electrical appliance functioning, at least a pair of input terminal (V+ and V-) must be implemented for supplying electrical current, **Gunton** simply not going into the circuit detail as shown by **Graf**.

7. Claims 3, 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gunton** and **Graf** in view of **Aldridge et al** [6,140,620].

Regarding claims 3 and 22, **Gunton** and **Graf** do not disclose specifically the timer activation signal comprises a current induced by electrically closing the input terminals to complete a query enabling circuit; **Aldridge et al** (fig. 1) use an appliance timer comprising a current induced (transformer 12) by electrically closing the input terminals to complete the timer circuit 14. It would have been obvious to one having ordinary skill in the art at the time of the invention was made the use of an induced current to complete a circuit is merely based on designer choice of current supply and the safety for the device.

Regarding claim 11, the timer circuit of **Aldridge et al** (fig. 1) comprises a set of function connection terminals (output plug connector 24) for selectively connecting a selected function (selected electric appliance).

8. Claims 4 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gunton** in view of **Alley et al** [US. 5,823,235].

Regarding claims 4 and 23, **Gunton** does not disclose a sensor responsive to fluid delivery characteristic to generate the timer activation signal; **Alley et al** suggest a safety shut-off system for fluid delivery comprising a pressure sensor (pressure differential switch; abstract) which generate a timer activation signal when the delivery pressure become stabilized (col. 1, line 65 through col. 2, line 17). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to apply **Alley et al** suggestion using a pressure activated timer to assure the stability of the fluid delivery system for safety reason.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gunton** and **Alley et al** in view of **Thompson** [US. 5,441,070].

Regarding claim 5, **Gunton** and **Alley et al** do not disclose a flow sensor; **Thompson** (abstract) introduces a fluid management system comprising a pressure sensor and a flow sensor to prevent damage to the fluid supply system, the sensors responsive to the fluid delivery characteristic to generate the timer activation signal. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to apply **Thompson** suggestion using a pressure and flow activated timer to give additional safety to the fluid delivery system.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gunton, Alley et al** and **Thompson** in view of **Bailey et al** [US. 5,142,271].

Regarding claim 5, **Thompson** does not specify in detail the fluid flow sensor; **Bailey et al** (abstract) gives detail description of a fluid flow sensor comprising a float position sensor (level motion sensor). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to apply **Thompson** and **Bailey et al** suggestion using a fluid flow float sensor to give additional safety to the fluid delivery system.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gunton** in view of **Link** [US. 5,975,162].

Regarding claim 9, **Gunton** discloses the remote control unit 24 having keys 40 sending instruction to the control unit 38 to open or close the valve or to make other modification to the delivery arrangements (col. 2, lines 62-67); **Link** more specifically teaches a remote control unit used for a vehicle fluid delivery system having keys activating function for a throttle activator, a reel winding activator and an engine kill activator (abstract; col. 10, lines 41-49; claims 10-15). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to apply **Link** teaching in **Gunton** remote control with additional control functions for the convenient of a user having centralized control functions at hand.

***Allowable Subject Matter***



Art Unit: 2636

12. The following is an examiner's statement of reasons for allowance:

Claims 15-19 are allowed over prior art of record because the cited references either alone or combined do not disclose the claimed invention:

A safety shutdown system for controlling a fluid delivery system, the fluid delivery system including a valve for selectively closing flow between a tank on a vehicle and another tank structurally separate from the vehicle, and an engine for driving a fluid delivery pump, the safety shutdown system comprising:

a timer activated in response to a timer activation signal for timing a countdown interval;

one or more sensors responsive to one or more selected fluid delivery characteristics to generate the timer activation signal;

at least one pair of input terminals for selectively inputting the timer activation signal;

a wireless transmitter transmitting on a radio frequency for selectively transmitting a timer reset signal to the timer to reset the countdown interval;

a controller for automatically closing the valve and killing the engine if the timer times out;

an alarm for activation by the controller prior to the timer timing out; and one or more function activators for activating one or more selected functions in response to a function activation signal from the wireless transmitter.

The underline limitations are critical since it shows the system of improvement.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Cochran et al** disclose an automatic shut-off device for pipe. [US. 6,164,319]

**Cothorn et al** disclose an automatic emergency shut-off system for delivery transports. [US. 6,788,209]

**Faulk** discloses an automatic leak detection and shut-off system comprising a flow-float sensor. [US. 5,568,825]

**Ross et al** disclose an electronic latching circuit for momentary contact switches. [US. 5,554,895]

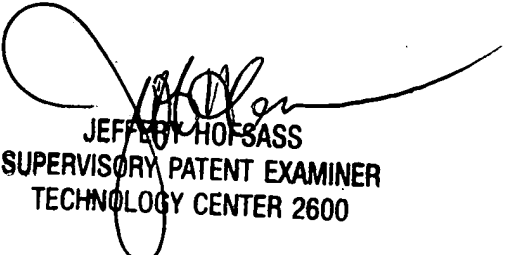
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne V. Lai whose telephone number is 571-272-2974. The examiner can normally be reached on 8:00 am to 5:30 pm, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass Jeffery can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*AVL*

A. V. Lai  
January 4, 2005

  
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